TABLE 43

Domestic R&D paid for by the U.S. federal government and performed by the company, by type of R&D, industry, and company size: 2018

(Millions of U.S. dollars)

Industry and company size	NAICS code 21-23, 31-33, 42-81	Total	Basic research		Applied research		Development	
All industries		24,685	2,510	i	5,097	i 1	7,078	
Manufacturing industries	31-33	18,980	1,732	i	2,766	i 1	4,481	
Food	311	*	i *		*		*	
Beverage and tobacco products	312	0	0		0		0	
Textile, apparel, and leather products	313-16	0	0		0		0	
Wood products	321	*	i *	i	*	i	*	
Printing and related support activities	323	*	i *	i	*	i	*	
Chemicals	325	204	24		32		149	
Pharmaceuticals and medicines	3254	188	23		25		140	
Other chemicals	other 325	16	1		7		8	
Plastics and rubber products	326	2	*		1		1	
Nonmetallic mineral products	327	2	0		0		2	
Primary metals	331	2	i *	i	*	i	2	
Fabricated metal products	332	3	i *	i	*	i	3	
Machinery	333	175	3		9	i	163	
Computer and electronic products	334	5,174	146	i	690		4,338	
Semiconductor and other electronic components	3344	50	*	i	13		36	
Navigational, measuring, electromedical, and control instruments	3345	4,198	85	i	598		3,515	
Other computer and electronic products	other 334		i 61	i	78		787	
Electrical equipment, appliances, and components	335	39	2	i	1	i	36	
Transportation equipment	336	13,321	i 1,556	-			9,739	
Aerospace products and parts	3364		i 1,539	i	1,888	_	8,740	
Other transportation	other 336	1,154	17	H.	138	1	999	
Furniture and related products	337		i *	i	*	i	2	
Miscellaneous manufacturing	322, 324, 339	54	1	H.	7	+	46	
Nonmanufacturing industries	21-23, 42-81	5,705	778		2,331		2,597	
Information	51	50	6		18		26	
Publishing	511	36	5		17		14	
Telecommunications	517	8	0		0		8	
Data processing, hosting, and related services	518	5	*	i	1	i	3	
Other information	other 51		i 0	'	1	i	*	
Professional, scientific, and technical services	54	5,620	771		2,308	•	2,542	
Architectural, engineering, and related services	5413	875	19		595		260	
Computer systems design and related services	5415	493	29	i	205	+	258	
	5417	3,920	676	<u>'</u>	1,462	+	1,783	
Scientific research and development services Research and development in biotechnology	541711	77	0 - 38		11 - 49		29	
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	3,215 - 3,324	248 - 359		1,278		1,688	
Research and development in the social sciences and humanities	541720	518 - 627	280 - 403		134 - 172	i	66	
Other professional, scientific, and technical services	other 54	332	47		45		241	
Other nonmanufacturing	21-23, 42-49, 52, 53, 55-81	35	1		5		29	
All companies (number of domestic employees)	-	24,685	2,510	i	5,097	i 1	7,078	
Small companies								
10-19 ^a	_	462	28	i	180		253	
20-49	_	759	36		183	+	540	
Medium companies		7.59	30	1	100	+	J-0	
50-99		561	73		137		350	

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Domestic R&D paid for by the U.S. federal government and performed by the company, by type of R&D, industry, and company size: 2018

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Basic researc		Applied research		Development	
100-249	_	1,378	144		416	i	818	
Large companies								
250-499	_	1,016	122		257		637	
500-999	_	128	26		34		68	
1,000-4,999	_	1,462	385		567		510	
5,000-9,999	_	1,175	8	i	31		1,136	
10,000-24,999	_	2,161	83	i	226		1,853	
25,000 or more	_	15,583	1,605	i	3,065	i	10,913	

^{* =} amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.

^a Business Research and Development Survey does not include companies with fewer than 10 domestic employees.